

Please insert the following Abstract:

#### ABSTRACT OF THE DISCLOSURE

The invention relates to a titanium oxide-based polymer composition. The inventive composition comprises a  $\text{TiO}_x(\text{OH})_y(\text{H}_2\text{O})_z$  ( $x+y+z=3$ ) titanium oxide-based polymer in the form of a gel or sol. Said polymer, which has a one-dimensional (1D) structure, is made from concentrically-wound fibers having a periodicity which is deduced from the spacing between said fibers, of between 3.5 Å and 4 Å. Each fiber comprises  $\text{TiO}_6$  octahedrons and each  $\text{TiO}_6$  octahedron shares two opposite edges with two adjacent octahedrons ( $2 \times 2.92$  Å) in order to form infinite chains which develop along the axis of a fiber. According to the invention, two adjacent chains form double lines as a result of the shared edges ( $2 \times 3.27$  Å). The inventive polymer is suitable for use as a photosensitive element in a photovoltaic cell, such as a sunscreen for a window.